NIC 11099
NWG/RFC# 374
IMP System Announcement

Alex McKenzie (BBN)
19-JUL-72

11099
Posted

Revd 3 Aug 72

There are two significant developments in the operation of the network which should be of interest to all sites: 1

NEW IMP SYSTEM IS RELEASED ! 1a

On Tuesday, July 18, the new IMP software described in previous RFC's (#331,#343,#359) was apparently successfully released. We ran from 10:00am on that day until Wednesday afternoon with very few network problems attributable to the new system. We are quite pleased with this performance, and expect to leave the new system up permanently!! 1a1

We are, of course, aware that in any system of this size, bugs may crop up at any time, and we solicit the help of the network community in finding them. We also believe that the new system may have a different "feel" to users, both terminal users and Hosts. We urge everyone to have a bit of patience while getting used to any change in the "feel" of the network. On the other hand, PLEASE REPORT ANY SUSPECTED NETWORK MALFUNCTION TO THE NCC AS SOON AS POSSIBLE. Evidence of bugs, guesses as to what went wrong, etc., are always useful in hunting bugs, but don't let the lack of positive proof delay the reporting of suspected system malfunction. The NCC telephone number is

(617) 661-0100

Feel free to call collect! 1a2

The one known shortcoming of the new software is the exacerbation of a long-standing TIP software problem. The TIP now often appears to neglect sending an Allocate control message for some active connection, with the effect that the Server-to-User path becomes blocked. We are giving the solution of this problem the highest priority! (Our current data seems to indicate that this problem is most likely to occur when there are several users and when the Server Host is a TENEX system. If you know of other situations where this problem has occurred, please let us know!) 1a3

Now that the new system is up, all sites with Model 516 IMPs will be contacted by telephone and asked to reset the switches on their IMPs as follows: 1a4

HALT INH - on 1a4a

W.D.T. - on 1a4b

AUTO RSTRT - on 1a4c

MEMORY PRTCT - on 1a4d

SITE POWER PROBLEMS 1b

The network has recently been experiencing serious difficulties related to the annual problem of more demand for electricity than is available during the summer months. For example: 1b1

During the month of June, between 1/4 and 1/2 of the IMP down time was due to site power failure. 1b1a

During the weekend of July 15-16, two sites were down all weekend due to air-conditioning failure which was apparently related to power failures or brownouts. This left several sites connected to the rest of the net through only one path which, according to Murphy's law, eventually failed - leaving nine sites partitioned from the remainder. 1b1b

On July 18, an underground power transformer supplying power to the entire computer room at site 27 failed, putting IMP 27 out of action for several hours (and it could easily have been several weeks). 1b1c

Obviously in these cases there is little that either the NCC or the site can do to restore service. We expect these situations to continue or even get worse as the summer continues. Please try to restrain your annoyance when these situations arise; we don't like them either! 1b2